

IN THE CLAIMS

1- 58 Canceled.

1 59. (previously presented)An apparatus for use while drilling a borehole, said apparatus
2 comprising:

3 (a) a longitudinal member for rotating a drill bit and adapted to be conveyed
4 in the borehole;

5 (b) an acoustic transmitter on a sleeve slidably coupled to said longitudinal
6 member, and

7 (c) an acoustic receiver spaced apart from said acoustic transmitter, said
8 acoustic transmitter disposed on a sleeve slidably coupled to said
9 longitudinal member.

10

1 60. (new) The apparatus of claim 59 wherein said sleeve in (b) is the same as the
2 sleeve in (c).

3

1 61. (new) The apparatus of claim 59 wherein said acoustic transmitter comprises a
2 three-component transmitter.

3

1 62. (previously presented)The apparatus of claim 59 wherein said acoustic receiver
2 comprises a three-component receiver.

3

10/694,554

1 63. (previously presented) The apparatus of claim 59 wherein said acoustic transmitter
2 comprises one of (A) a pulse transmitter, and, (B) a swept frequency transmitter.

3
4 64. (currently amended) A method of determining a parameter of interest of an earth
5 formation penetrated by a borehole during drilling operations, the method
6 comprising:

- 7 (a) conveying a bottom hole assembly (BHA) into the borehole, said BHA
8 including a longitudinal member for rotating a drill bit thereon;
9 (b) maintaining an acoustic transmitter on said BHA in a substantially non-
10 rotating position and propagating acoustic signals into said formation;
11 (c) maintaining an acoustic receiver on said BHA in a substantially non-
12 rotating position and receiving an acoustic signal resulting from
13 ~~interaction~~ reflection of said propagating signals ~~with said formation from~~
14 a seismic reflection in the vicinity of said borehole; and
15 (d) determining from said received acoustic signals said parameter of interest.

16
1 65. canceled (previously presented) The method of claim 64 wherein said received
2 acoustic signals comprise reflections from a seismic reflector in the vicinity of
3 said borehole.

4
1 66. (currently amended) The method of claim 65 64 wherein said parameter of interest
2 comprises a distance to said seismic ~~reflector~~, reflector.

3

1 67. (previously presented) The method of claim 66 further comprising guiding said BHA
2 at least partially in response to said determined distance.

3

1 68. (previously presented) The method of claim 64 further comprising maintaining said
2 acoustic transmitter and said acoustic receiver at a specified distance from each
3 other.

4